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Design

THE MONTHLY JOURNAL FOR MANUFACTURERS AND DESIGNERS



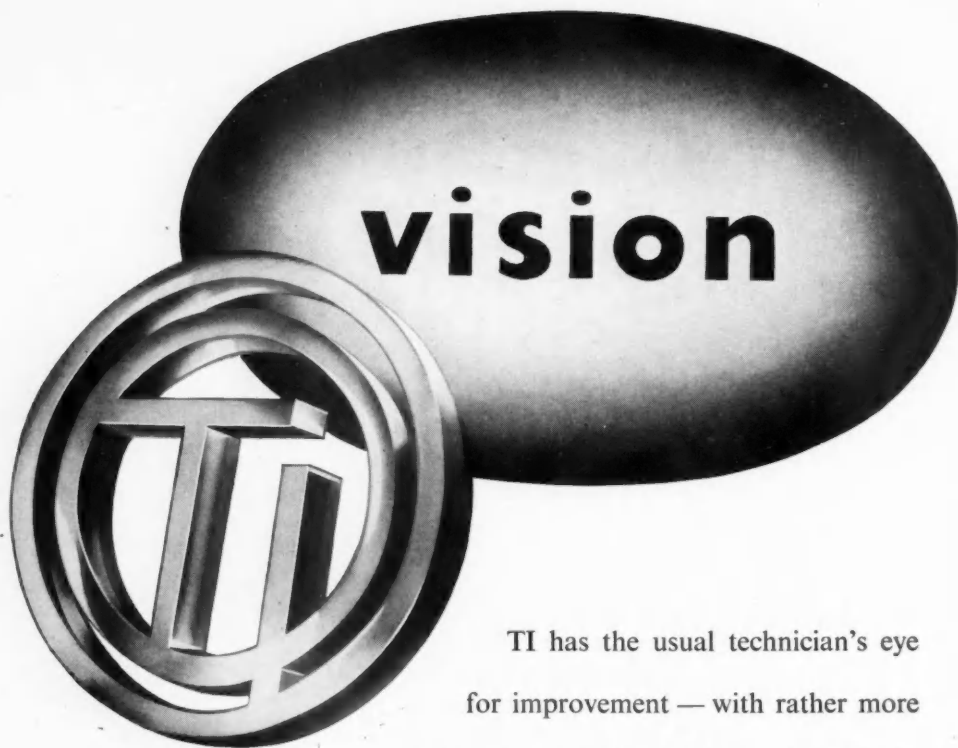
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Design

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CONTENTS

Design in the air	3
PATRONS OF DESIGN:	
Josiah Wedgwood <i>Gabriele Ullstein</i>	4
METHODS AND MATERIALS:	
Enamel pictures from a bath-factory <i>Arthur Hald</i>	10
Marketing successes	12
DESIGN OVERSEAS:	
Fantasy and function at Milan <i>Toni del Renzio</i>	14
CASE HISTORIES:	
Redesign of capital equipment	16
Before and after	18
DESIGN TRAINING:	
From a technical college	20
Design versus danger <i>Kenneth Howes</i>	21
DESIGN AND THE RETAILER:	
Experiment in shop layout	24
Sheffield tribute to Alfred Stevens	30
Design and Management (Congress)	31
News	2, 29, 35

FRONT COVER PICTURES

Amami packaging
(page 13)



Comet air liner
(page 3)



Wedgwood show-room (page 8)



Creda kettle (page 21)

Design Congress

THE COUNCIL OF INDUSTRIAL DESIGN was much encouraged by the results of the 1951 Design Congress* held at the Royal College of Art for two days in September. The Congress was planned for industrialists and top executives of business firms. It was convened to consider Design Policy as a Responsibility of High-Level Management. The 23 papers were given by senior representatives (in most cases the boss himself) of firms at home and abroad, which have for many years pursued consistent and successful design policies.

That some 250 busy manufacturers were prepared to give up two days to this question and to contribute towards the cost of the Congress was itself evidence of the distance British industry has travelled since a handful of pioneers founded the Design and Industries Association in 1915.

There was unanimous support for the contention that design policy must come from the top. It was clear too that a sound design policy, like sound methods of business management, can be adapted for use in any trade; the broad problems of inspiration and control are common to many industries. The study of other firms' and other countries' methods can be as rewarding as the copying of competitors' products can often be shortsighted.

It was noticeable, however, that the best designs come from firms that tackle the problem as a whole, that treat design not only as an aspect of production but as a question affecting every side of a business, from factory buildings to letter-headings. To be really successful design must become a habit of mind and it was remarked that where a consistently high standard is maintained throughout an organisation there is always someone on the board who takes a personal interest in the problem. Thus good design becomes as much a question of internal public relations as of external promotion. The idea must be sold right through the company. Not until this happens will the design director and his staff win equal standing with other specialists.

And yet, as a Dutch manufacturer pointed out, a firm may go through all the correct motions for establishing a design policy without achieving an acceptable standard. In the last resort it is a question of education at the top, of a liberal education in the arts combined with a realistic and knowledgeable business sense. P. R.

* Points from Congress papers: see pages 31-34

Notebook

THE COMMERCIAL VALUE of good design was discussed by several speakers at the Design Congress. One of the most forthright of these was Arthur A. Houghton, Jr, of Corning and Steuben Glass, USA, who told his audience that the establishment of a design department was "one of the cheapest methods of promoting sales"; it cost less than one-tenth of one per cent of total sales.

Another of Mr Houghton's comments was on "the basic importance of having design activities stem from within the company." He predicted that in ten years' time "industrial design which is not internally integrated with company management will be as antiquated as the ox-cart."

THE IMPORTANCE of "Design *versus* Danger," a subject discussed in this issue by Kenneth Howes, one of the younger product designers, is emphasised by two press notices received in DESIGN's editorial office within a few days of each other. The first is a warning from the Board of Trade about a toy electric iron with an imitation plug which will fit into a real electric wall socket with harmful—and probably fatal—results. The second, from the British Standards Institution, announces the publication of a new Standard, "Safety Requirements for Electric Fires," (BS 1670: 1951, 2s). The purpose of this specification is "to establish a minimum standard of safety for electric fires and to secure a satisfactory standard of mechanical and electrical construction." The designer's co-operation is vital to the achievement of such aims.

APPEARANCES COUNT: a "Market Digest on Packaging Machinery,"* prepared by the UK Trade Commissioner Service in Canada, quotes the case of one of Canada's largest distributors of American packaging equipment who "lost orders . . . because the eye-appeal of competitors' equipment was more suitable to the operating superintendent of the purchasing firm."

A similar point is made, more colloquially but no less clearly, in a report from a South American importer of printing machinery to his London agent:

"What [a customer] also kicks about is the finish of the machine and the paint job. . . . Other English machines are *nicer looking* and, believe it or not, *looks* does count in selling machines too. When X's see that we mean business and have sent them orders for many thousands of pounds, it is about time they spent a fiver on a can of good paint. I feel that though the Y machine costs £1,000 more than X's, we will soon be selling as many Y's as X's because of appearance."

MATERIAL SHORTAGES are achieving something which aesthetic considerations have so far failed to achieve—a reduction in the amount of chromium plating on the new cars. Both in Britain and in the United States, the need to conserve supplies of certain metals for defence purposes has affected design in the motor industry—as in other consumer-goods industries. One result was evident at the Motor Show, where several makers used paint finishes, matching the rest of the bodywork, for large components which it has been their usual practice, in recent years, to chromium-plate.

This year the Show's biggest attraction was, unquestionably, the smallest car there—the new Austin Seven. Its arrival has been so long heralded that one feared the worst: but the fears prove to have been largely unjustified. The new Baby has lots of bulges and dimples, certainly; but no dollar grin.

AT THE RECENT Building Research Congress, Sir Ben Lockspeiser, Secretary of the Department of Scientific and Industrial Research, spoke on the place of science in the building industry. Concluding, he said: "I may have given the impression that science and its machines are the only things that matter, or that they matter most. They *do* matter, because we are living in a century which . . . has been conditioned by science and will be maintained by science; [but] we must not allow ourselves to become surrounded by ugliness or lose our zest through the daily sight of a drab stereotyped monotony which the machine is only too ready to give us. . . . We have to keep a close watch on the machine, and only the artist can do it. . . .

"The best in design comes as much from vision and imagination as from calculated thought, and if we keep this balance true, the age of the common man need not become the age of the commonplace."

TAILPIECE: an eye-catching phrase in *The Times*—"Thankful Designer." It proved to be the name of a highly commended bull at the Royal Norfolk Show.

A. D.

* Quoted in the *Board of Trade Journal*, 11 August 1951

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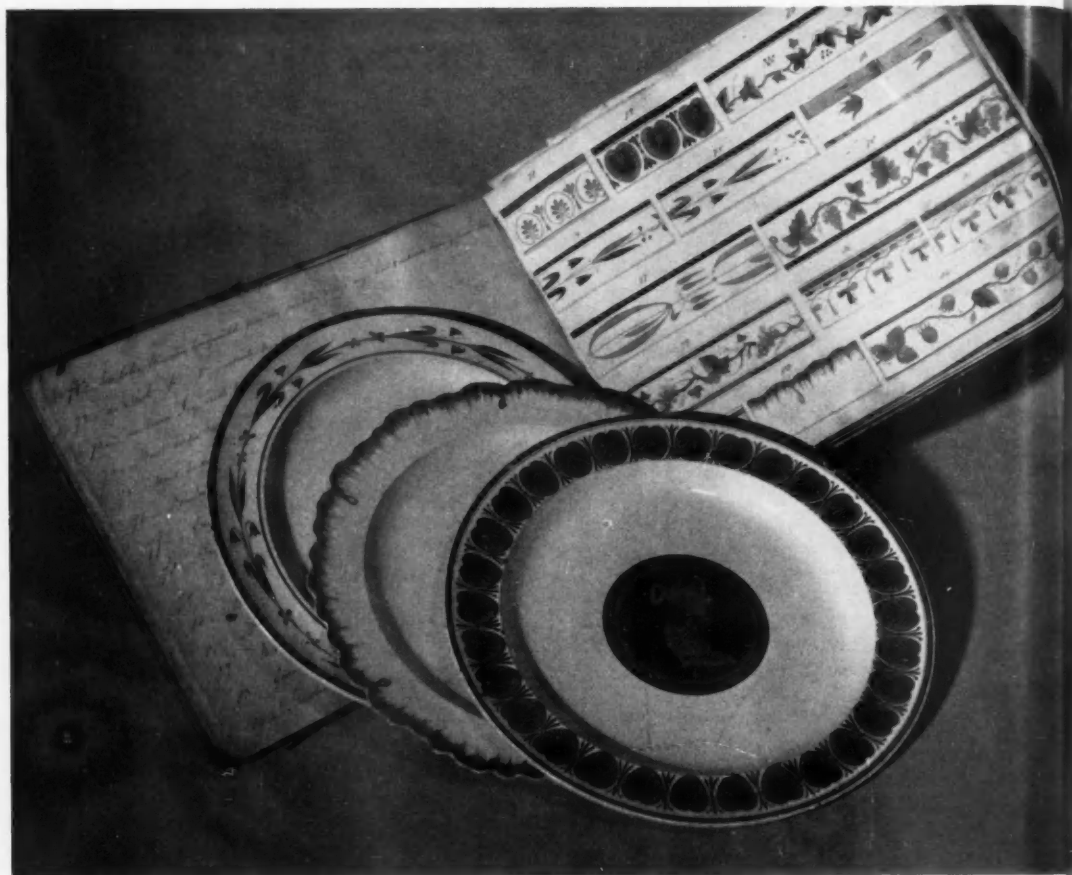
Design in the air

The last word in piston-engined air-liner design, the Airspeed Ambassador (left) is going into service, after a long development period, on British European Airways' routes; but BEA's chief executive, Peter Masefield, has announced: "We do not want any more aircraft powered by piston engines; in future we shall order turbine aircraft."



The change from traditional aircraft shapes is already evident in the first turbine-engined air liner, the DH Comet (above), now under test by BOAC; but accepted ideas of aircraft aesthetics will have to be further revised if such unorthodox shapes as the Avro 707B research aircraft (right) ever become common. Its delta wings have a span of only 33 feet—nine feet less than its length





Beginnings of the living tradition: the first Wedgwood pattern book, covering the period 1769-1814. The earliest patterns were in restrained classical style; later, as contact between England and the East was strengthened, Chinese motifs became more fashionable

Wedgwoods have always believed in using design talent from outside as well as inside the firm. This tea-set of 1783 was designed by Lady Templetown and modelled by William Hackwood, "a great worker in clay"—the chief works modeller at that time. It is in the famous white and blue jasper ware



JOSIAH WEDGWOOD

"A pottery firm that wants to live long must take a long view of design"



"MR JOSIAH" is what the 1740 employees of Josiah Wedgwood and Sons Ltd call their managing director. He is the great-great-great-grandson of his namesake who founded the pottery in 1759 and was himself descended from five generations of potters. The first Josiah not only invented two (Queen's ware and jasper) of the three types of ware which are now the firm's staple product, but was also responsible for numerous designs still manufactured for decorative purposes as well as sets of ware for daily use. A man of wide interests, he took steps in the beginning to call on well-known artists of his time to design for him, a tradition worthily upheld by his descendants. Indeed, he may have been said to have done his work almost too well, for he rapidly built up a thriving export trade with America during the eighteenth century: the very word *Wedgwood* there came to mean fine china and the patterns became so famous—and pottery patterns are long-lived to provide replacements—that Hensleigh Wedgwood, the firm's present American representative, admits that it was perhaps harder to get his public to accept new designs in Wedgwood than it might have been for other potters to do so! This is a serious matter in these days of overfull export order-books and no experiments in decorated pottery on the home market.

Tall, lean, dark-haired, gentle and humorous, the present "Mr Josiah" looks as though he might be a don, or a scientist, or a literary editor. It is the appearance typical of England's intellectual aristocracy in which the Wedgwoods, with their Darwin and Allen connections, are one of the grandest lines. By profession, Josiah Wedgwood is an economist. Educated at Bedales, University College, London, and the London School of Economics, he served in the RFA from 1918 to 1919, and then joined the recently-formed Rural Industries Bureau.

The Wedgwood tradition is enormously strong. Visiting the works one realises, if only from the various regular conducted tours going on all around, that this is a national institution. Our guide had been fifty-three years with the firm. There he had met and married his wife, who herself had worked forty-two years in the enamelling shop. We passed a stack of throw-outs. The flaws in some were almost invisible to an outsider. Why couldn't they be sold as rejects? "Because," said the old man sternly, "that would lower the standard. And once you does that, you loses your tradition."

The problem, then, is not only to endeavour constantly to raise the technical standard, but to keep the tradition a *living* tradition (the phrase, minus italics, appears in all Wedgwood literature). Many of the factory's eighteenth-century designs are still turned out in great quantities, because the shape of a certain cup or teapot is so comely and convenient that it has been in constant demand for nearly two centuries. Immense sales are not always to be taken as proof of fine design, though many manufacturers advance this theory. But large sales over such a great period of time must surely indicate an inspired solution of the problem of design, because anything so ephemeral as fashion or stunt advertising could not be the reason. New designs—though fewer than before the war when the work of Eric Ravilious and others was becoming known—continue to be put on the market. "It's the difference between taking a long or a short view," says Mr Wedgwood. "We have to think of our reputation. To a firm like this, fame means a good deal. Fame is, in fact, the spur." And fame cannot be maintained merely by copying, however impeccably, the admired products of the eighteenth century.

Josiah Wedgwood is an idealist but his training in



economics has made him a hard-headed one. He has always taken a practical interest in the wider aspect of industrial design problems. Josiah Wedgwood was an original member of the Council of Industrial Design when it was set up in 1944 and was Chairman of the Council of the Royal College of Art in 1948-9 during its complete reorganisation. It is true that he feels a sense of mission about industrial design, but, he says, "I've no use for a missionary who is uneconomical and then wails that his public doesn't appreciate him." His chief designer and art director, Victor Skellern, takes the same business-like view: "This firm makes what it thinks is good. But a factory exists on what it can sell." Skellern is a local boy who came to work in

the pottery at the age of fourteen. Like many of the firm's employees, he studied part-time at the local art school. When his exceptional talent was recognised, he was sent to the Royal College of Art where for four years he studied not so much pottery as every other kind of design and absorbed the atmosphere of a great city. He got what his employer calls "a liberal education in the arts." Skellern combines all the qualities Mr Wedgwood considers essential to a first-class industrial designer: "artistic ability, co-operative personality, the capacity to study appreciatively different materials, techniques and tastes." He is responsible not only for the Wedgwood design studio, but for everything in and around the firm which has a visual

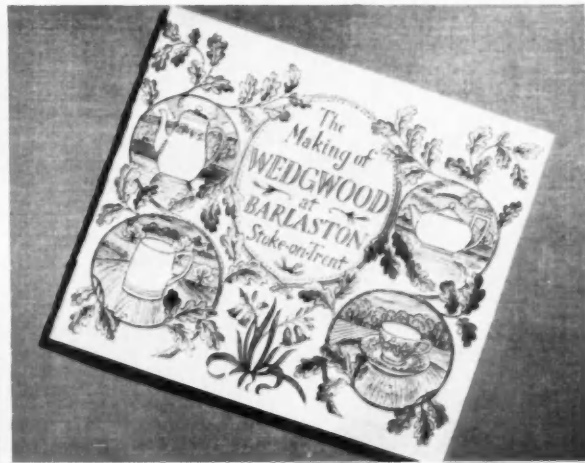
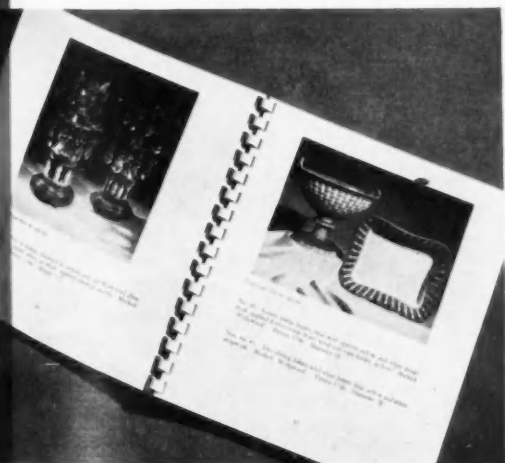


Transfer-printed decoration (above) and hand painting (right) on two teapots of the same basic shape. The tea-set is the St James's pattern—gold on mazarine blue



(Left) A best-seller in North America: the traditional Green Leaf pattern, formerly printed in outline and filled-in by hand, now colour-printed

(Right) John Hamilton Wedgwood, sales director of Josiah Wedgwood and Sons Ltd, and Victor Skellern, ARCA, FSIA, NRD, the firm's art director. "To the art director or his deputies are referred not only all problems of pottery design, but other aesthetic problems such as the layout and production of catalogues, leaflets and advertisements." (Below) A typical double-spread from the catalogue of the Early Wedgwood Pottery exhibition held in London last summer, and a booklet cover in grey, blue and green



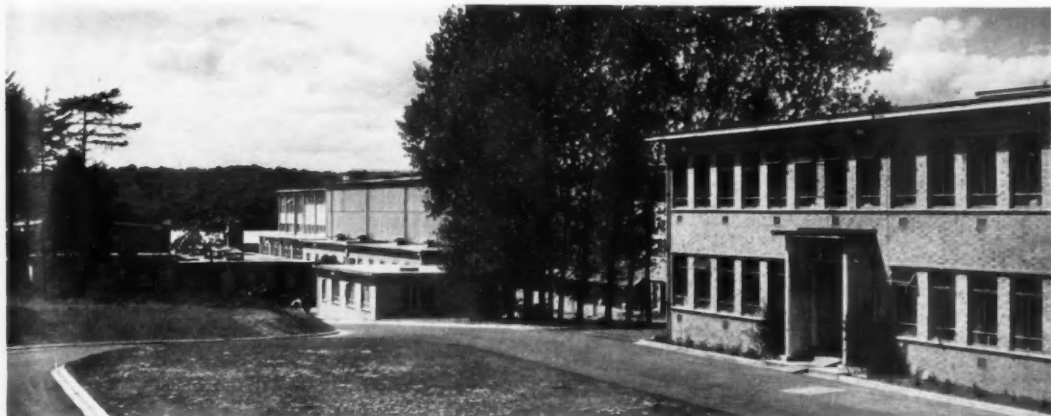


This year, Wedgwood's London showrooms in Wigmore Street have been redesigned—the room shown at top of page by R. D. Russell and R. Y. Goodden; the exhibition room, in smaller picture, by Keith Murray

The quoted phrases in captions on pages 4 and 7, and the sub-heading on page 5, are taken from a paper by the Hon. Josiah Wedgwood read at the 1951 Design Congress

aspect, from the cheque forms to the highly agreeable colour scheme of the workshops with their pale green machinery, pastel blue light fittings, and occasional splashes of red paint. It is strange to think that Wedgwood is one of the few potteries with an art director on the staff, and almost the only one to make serious and continued use of outside designers. The latter work on a retaining fee plus royalties, a system which Wedgwoods have proved to be very acceptable to all concerned.

It would be impossible to discuss Josiah Wedgwood as a patron of design without mentioning the new Wedgwood works at Barlaston, where the pottery moved from Etruria, the original site at Stoke-on-Trent, in 1938. Nothing could be less like the conventional idea of a pottery with black smoke-stacks and bottle kilns. The attractive new factory—one of the most up-to-date in the world—was designed by an architect, Keith Murray, who had earlier been called in to design pots for the firm. His interest in and knowledge of all the technical processes proved of great value in laying out the new works, which are part of a carefully thought out town-planning scheme including villages, a school, a sixty-acre park, pools



Keith Murray was the architect for Wedgwood's new factory at Barlaston

for bathing, boating and fishing, shops, and a community hall. Not all of these are yet complete, but the fortunate workers from old Etruria who have already settled there speak enthusiastically of their new surroundings. The estate is yet another instance of the "living tradition," for the Wedgwood family has a long history of progressive social endeavour. Taking the word design to include design for living, it also

shows the managing director conforming to his own idea of a good designer: "The best designers," he said in a lecture to the Royal Society of Arts in 1946, "certainly may be said to initiate new fashions, but they do so not by imposing on an admiring world an idea conceived *in vacuo*, but perhaps by a feat of mental gymnastics, keeping an ear to the ground as well as their eyes on the stars." GABRIELE ULLSTEIN



Black basalt vase made to commemorate the first Josiah Wedgwood's move from Bell Works to Etruria, 13 June 1769

ENAMEL PICTURES FROM A BATH-FACTORY

A new decorative technique which may be used for wall plaques and outdoor furniture



by Arthur Hald, *Editor Form and Kontur*

THE NAME Gustavsberg is known in Sweden and other countries principally for a high standard of production in sanitary porcelain, table china, and ceramic art. But it is also known for progressive community planning, backed by the Cooperative Union—owner of the factory—and its architectural office. The factory has been enlarged during recent years and its products now include plastics and baths. Gustavsberg is the only factory in Europe which manufactures baths of stamped sheet steel, coated with enamel fired at 800° Centigrade. The method depends on the use of almost 100 per cent pure sheet steel, which is manufactured by only one Swedish firm, Domnarvet; the quality of the steel is a prerequisite for durability of the enamel. The enamel is sprayed on the painted baths with a spray gun after they have been stamped out. They pass, on an endless chain, through the firing oven.

This purely mass-production technique has become a starting point for experiments in a completely different field, the decorative arts. Gustavsberg's chief designer, Stig Lindberg, one of the youngest and most successful designers in Sweden, has seen the great potentialities which lie in the exploitation of the

The artist Egon Moller-Nielsen has painted and fired this enamel plate nine times, successfully building up a grey scale from light grey to intense black. The plate measures approximately 3 ft by 6 ft

RY

enamel technique. Steel plate can be treated in the same way as the artist treats his canvas. After the untreated steel plate has been prepared, it can be painted exactly like a gouache with water-soluble enamel paints in a practically unlimited range of colours. The sheet is then fired at 800° for about 45 minutes and acquires a strong weather-proof and even shock-resisting surface.

By varying the temperature by about 50°, different textures can also be obtained. At normal firing temperatures the surface becomes glossy. Over-firing produces either a dull or a rough surface. By repeated painting followed by firing it is thus possible to produce a series of various texture effects. The layers of colour—which are considerably more brilliant in this material than in others of similar nature—can be made opaque or transparent.

Enamelling is, of course, ancient as an artistic technique. The size of a piece of enamel work, however, is determined by the size of the firing oven and enamel work has hitherto been a *kleinkunst*. The oven in which baths are fired at Gustavsberg takes sheets of a size up to approximately 3ft by 6ft, which makes it possible to execute decorative assignments on a monumental scale. Unlike the fresco and ceramic techniques, which require years of work to be mastered, an artist can acquaint himself with the enamel technique in only a few hours. In firing a ceramic relief, even in the most up-to-date electric ovens, the result, which is more or less unpredictable, can never be modified. The enamel technique, on the other hand, by allowing a practically unlimited number of firings, makes it possible to work step by step through a very wide range of colours and textures.

The experiments conducted to date have been on the purely decorative artistic plane, but this is only the beginning and it is clear that there is a wide field of potential applications. For the time being, the ovens at Gustavsberg are used to their full capacity for mass-production of baths. However, the same technique is now being employed in manufacturing wall-plates which can be used in restaurants and other buildings as facings for parts of walls and counters. Some of Sweden's young abstract artists who work with architects are starting to use the material for exterior decorative friezes. One of them is now making a clock for a school, in which a system of coloured discs replaces the hands; the combination of colours indi-



Because the enamel paint can be made either opaque or translucent, it is possible to achieve a strong luminosity. This picture by Stig Lindberg gives an idea of the range of variations obtained through firings at various temperatures

cates the time. This new technique is also being used experimentally for table tops, for use both indoors and outdoors, and for garden furniture. The civic authorities of Stockholm have ordered a number of outdoor fireplaces to be built in parks, at strategic points near outdoor restaurants, to warm-up cold and gloomy evenings. The technique has, indeed, aroused considerable interest among artists and architects, and it is principally the limited supply of sheet steel that has made it impossible to test the material in all the fields where it may be suitable.

The development of industry throughout the world has usually resulted in individual hand-work being taken over by machinery. This, however, is a case in which mass production may give the artist who works individually a new material and new artistic possibilities.

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CORNING GLASS (USA)

Last March, Corning Pyrex glassware enamelled in colour was illustrated in *DESIGN* (left). In his paper at the 1951 Design Congress, Arthur A. Houghton, Jr, vice-president of Corning Glass Works (USA), referred to the "marked success" of this range: "The newly-formed design department was given credit for substantial assistance in reducing manufacturing costs; for a sales increase of 30 per cent; and for a reduction in the cost of merchandising aids amounting in some instances to 80 per cent."

Marketing successes in Britain and America

SCWS FURNITURE

THE ACCEPTANCE OF *Kelvin* furniture for the South Bank Exhibition "considerably increased demand" for this unit range (designed by R. D. Russell and R. Y. Goodden; illustrated opposite). The increase came mainly from London, the Home Counties and the South Midlands—not from Scotland, where the furniture is made at the SCWS Furniture Factories.

Demand has increased steadily over the past two years (see *DESIGN*, October 1949, pages 18-19), the firm is "well pleased with the results of this range", and will continue to supply it. Sales have reached just over 5 per cent of the Factories' total production—and that total is large: an increase in quarterly turnover of £46,000 was recently reported.

AMAMI PACKAGING

Considerable success in obtaining counter and window displays is attributed to "the added colour and attractiveness" of the Amami shampoo packs redesigned by Milner Gray (Design Research Unit) and illustrated below. Introduced just over a year ago, they "have been very well received by the trade," states A. E. Houchen, Marketing Director.

The modernisation of Amami packaging has since been extended to the firm's hand jelly* and wave-set. For the latter, Milner Gray has designed the bottles seen below, right. Curved like a pocket flask, these are easy to hold. (Manufacturers, Standard Bottle Co Ltd. Caps by John Dale Ltd; "half cartons" by Poppers Ltd.)

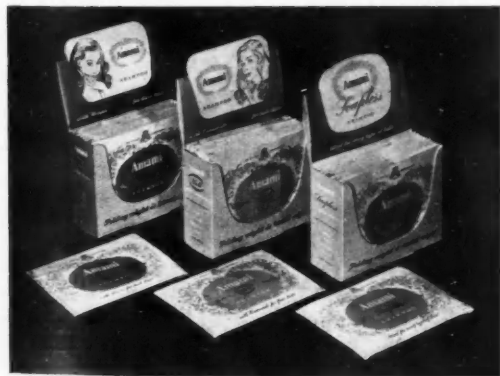
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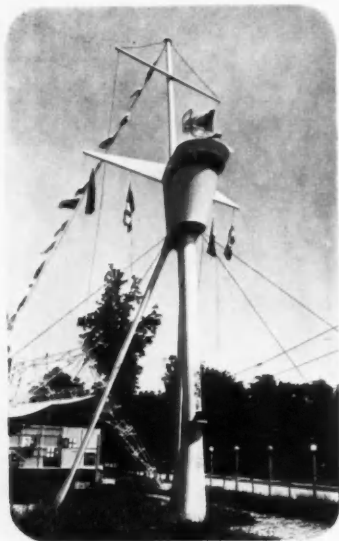


THE BUDD RAILCAR

Convinced of the usefulness of self-propelled diesel railcars on US railways, the Budd Company began production of their 90-passenger RDC-1 railcar (above) with an initial batch of ten. Seven were sold before the last of the ten was completed, and by the end of the first year 45 had been ordered by various railway companies for use on their short-distance services.

These figures were quoted by Dr Michael Watter, Director of Research in the Budd Company, in a paper which he read at the Design Congress. He pointed out that for an engineering concern such as Budd, the policy of catering for a limited number of customers "affords a marketing method based on negotiations rather than statistical consumer-preference analysis."





(Above) This reproduction of the mast of a new Italian ship demonstrates the Italian approach to design problems and is an elegant symbol of the shipping exhibit, one of the few outdoors. Along with other means of transport—"architecture in movement"—it was organised by a group of architects including Renzo Zavarella, best known for his rail coaches and station pavilions in *tensistruttura*. (This form of construction is used for the South Bank Skylon.)

DESIGN OVERSEAS

Fantasy **AND FUNCTION** *at Milan*

THE THEME OF the ninth Triennale of Milan has been the unity of all the arts and the special means of collaboration made possible by new techniques and materials. Robin Day has already described this great international exhibition (DESIGN No. 32, August) and has made it clear that the Scandinavian and other foreign contributions are in the main well known to readers of DESIGN. Like Gio Ponti, the Editor of *Domus*, he has remarked the specific, rich, fantastic Italian imagination at work within and against the rules of a rational architecture. This gives an excitement and a tension to the greater part of the exhibition that more than compensate for the inevitable failures of taste.

TONI DEL RENZIO



(Right) Fantasy and function combine to create this lighting exhibit, in which the severe forms of the Arteluce fittings are hardly less decorative, as a group, than the chains of glass globes.

(Left) A corner of the plastics display. The large bottles in the foreground are acid containers, comparable in volume to the familiar glass carboys. This hint of scale may help in the appreciation of the effect of shock calculated by the architects, Valenti and Mangiarotti.

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The Italian Post Office did its share in publicising the exhibition by issuing the two stamps illustrated above (designed by Ernesto Schedegger). The symbol on left of the 55-lire stamp was used on all Triennale booklets, stationery, etc.

It is a myth that in Italy only Milan is modern. This interior was designed by Nizzoli and a group of Neapolitan architects, and everything in it was manufactured in Naples. Nizzoli was a friend and collaborator of another Neapolitan, Edoardo Persico, one of the pioneers of modern design in Italy and at the centre of the modern movement until his death in 1936. Nizzoli has also been responsible for the good appearance-design of recent Olivetti typewriters.

Design: Number 35



REDESIGN OF CAPITAL EQUIPMENT

"Cleaning-up" and a degree of standardisation in a range of industrial washing machines

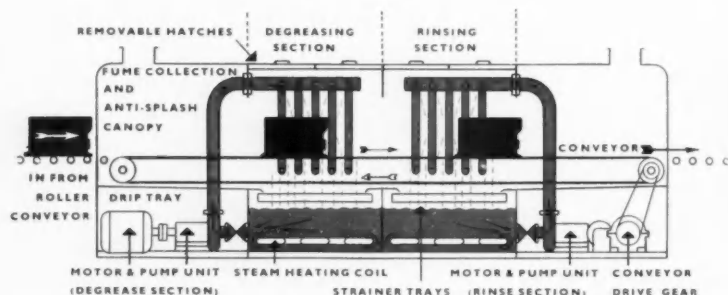
A SHREWD CRITIC of design, Roger Fry, once suggested that some mechanical products such as typewriters could never be beautiful. Thanks to recent advances in typewriter design, the example he chose is no longer valid, but his general opinion is still widely held. It is equally true, however, that many things which are not necessarily beautiful can at least be made inoffensive to the eye, by good design.

An example of mechanical equipment in this category is the range of industrial washing machines made by Edward Curran Engineering Ltd, Cardiff, the purpose of which is to remove grease and swarf from metal products by spraying them with alkaline solution at considerable pressure.

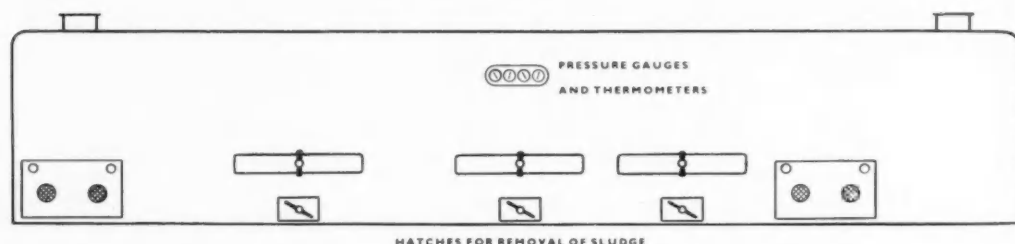
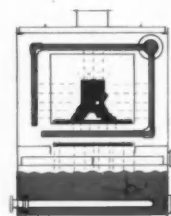
The earlier Curran plant of this type—15 years ago or even five years ago—was untidy in appearance, and unrelated as between one item in the range and another. Soon after the war, a first step towards re-

design was taken with the tidying-up of existing models, and recently more drastic redesign has introduced changes in mechanical features and constructional methods as well as appearance. Moreover, in the present range a considerable degree of standardisation has been achieved; all dimensions of housing and spray-pipe assemblies, except length, are standardised.* This systematic approach to design throughout the range of equipment has resulted in reduced production costs and, at the same time, in improved appearance. Some changes which have noticeably affected the appearance of the machines are listed opposite:

* This applies to the standard range of industrial washing machines, not to Curran's special-purpose machines for washing products of unusual shapes (such as the cylinder-block machine illustrated on this page); but these can sometimes be accommodated in housings of standard dimensions, with only the internal arrangements modified.



Black blocks in these diagrams represent typical objects passing through the washing machine, which is connected to the factory's conveyor system. Blue indicates liquid.



The width and height and many components are standardised for Curran industrial washing machines, from the smallest twin-chamber type to the largest: these extreme sizes are illustrated above

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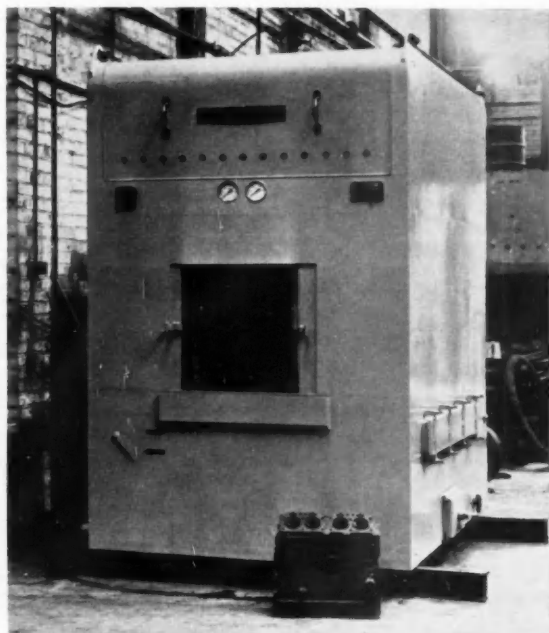
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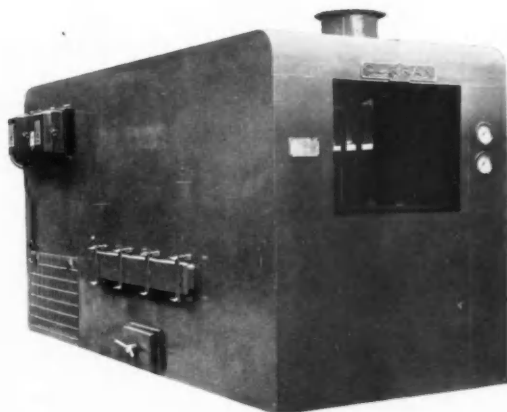
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Cylinder-block washing machine before and after redesign. Though this is a special-purpose machine, it follows the same trend of design as Curran's standard machines, shown in the other illustrations

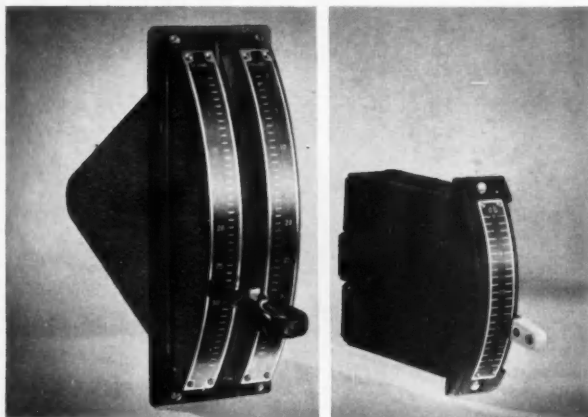
- 1: Pumps and conveyor drive units, which used to be attached externally, are now incorporated within the housing.
- 2: The separate framework of the older machines has been done away with (except for the base which carries the pumps). The housing, made of 3/16-inch steel plate, is strong enough to form a self-supporting structure.
- 3: Basket-shape filters, which were inserted and withdrawn vertically through the top of a bulge on the side of the machine, have been replaced by gauze trays which extend to the full width of the machine and are accessible through a hatch in the side. In the first redesigned machines, this hatch was held in place by eight wing-nuts; a later refinement is the use of two bolts, cam-operated by a single handle. "Tidying-up" has in this instance effected a reduction in the time required for removing and cleaning the filters, which should help to overcome the operator's reluctance to do this task before it becomes absolutely necessary.
- 4: Changing the layout of the conveyor belt has saved four sprockets and two shafts, besides abolishing a virtually uncleanable area in the bottom of the housing, where the belt formerly ran. It is now kept above the level of the end drip-trays.



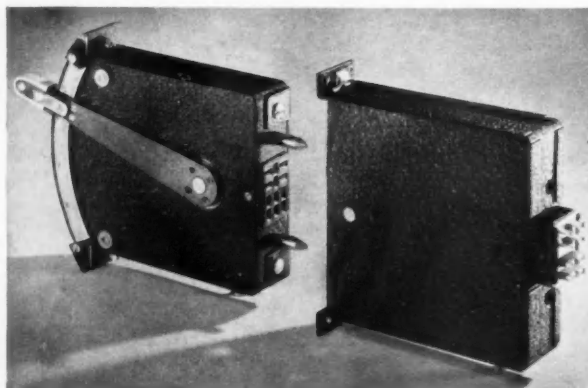
Redesigned single-chamber washing machine. This has no rinsing chamber, but in most other respects it is similar to the double-chamber machines illustrated diagrammatically on facing page.

A later refinement of design is the replacement of a hatch secured by eight wing-nuts (as above) by the type shown in close-up below. Perhaps the lettering will receive attention later: the designer is at least aware of its present imperfections

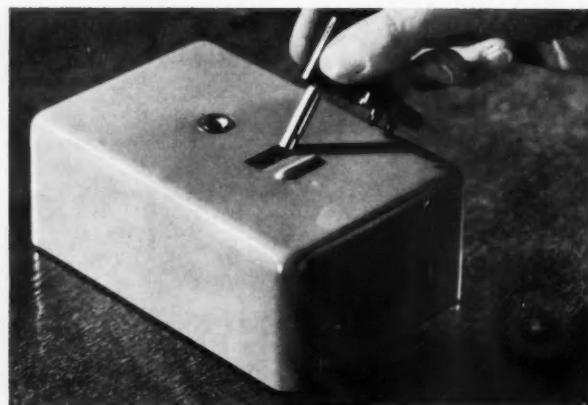




Painton faders for broadcasting stations. Frontal area of the new model (above right) is only 1½ x 5 in.; for ease of maintenance, its whole mechanism can be withdrawn from the front of the housing (as below)



(Below) The new Lectrilita, right, sells at £2 10s; both old and new models had Beetle cases, made by Merriott Mouldings Ltd



Before and after

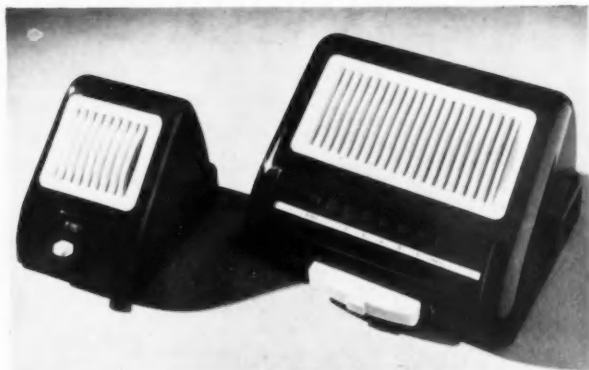
New fader: more compact

ONE OF THE most commonly used instruments on the control panels of broadcast stations, gramophone recording and film studios is the fader. Each programme controller has a number of faders within reach, and their size and shape determine the number that can be operated without discomfort.

The two faders illustrated are made by Painton and Co; the larger model has been in use for some years; the smaller one has been made possible through recent reductions in the size of electrical components. Designed by George Baguley, Cambridge, and Painton and Co Ltd, Northampton.

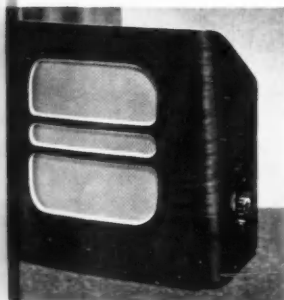
Lighter: action simplified

Four years ago, Dorset Light Industries Ltd first marketed a flintless electric table lighter, of which the two main components were the moulded casing and the torch, consisting of an "everlasting" asbestos wick in metal case. The redesigned model is easier to handle and requires less table-space: the action of lifting the torch out of the housing now produces a spark automatically, and the flame is extinguished automatically when it is replaced.

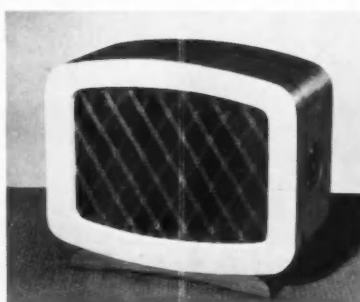
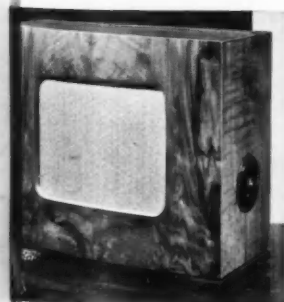


Cabinet: from wood to plastics

For some years The Edison Swan Electric Co Ltd has made intercommunication units using wooden cabinets. In 1949, the chassis for the master unit was redesigned, one of the main changes being the use of illuminated push-keys instead of switches. Insulators Ltd were invited to submit designs for moulded plastic cabinets of appropriate shape, one cabinet being required to house a master unit either for 6 or for 10 stations, the other, for the extension unit, containing only a 5-in. speaker, the switch and some small accessories. Designs by George A. Renvoize, LSIA, Insulators' staff designer, were approved by The Edison Swan Electric Co Ltd, and are now in production.



Whiteley Stentorian extension loud-speakers—old on left, new on right



(Above left) The old Ediswan master unit with selector switches in the form of narrow metal strips—not very pleasant to handle. The vertical bars across the speaker opening were repeated in the design of the extension unit (not illustrated)

The redesigned chassis (above) determined the form of the new master unit cabinet (top right): the new extension unit, shown alongside it, followed similar lines. The main mouldings are in black phenolic resin, while cream-coloured urea is used for the speaker frets and for the press-bar along the base of the master unit, which replaces the small on-off switch of the old design

Speakers: contemporary styles

These extension loud-speakers are made by Whiteley Electrical Radio Co Ltd, Mansfield. The old models were submitted for Design Review but were not accepted because of their uninteresting appearance. After friendly discussion between Whiteley's and Council of Industrial Design staff, the firm evolved a new range of cabinets, more in keeping with contemporary furniture design, which were not only accepted for Design Review but displayed in the South Bank Exhibition.

DESIGN TRAINING



WING CHAIR with turned and fluted legs in mahogany; group design by senior school students; upholstered by part-time day-release students



OCCASIONAL TABLES: the upper, with extending leaves, in maple and Australian walnut, by H. Smith; the lower, in brown oak, by Loo Kam Fatt, a Chinese student from Malaya now studying at Shoreditch. Both tables have removable trays



WORKBOX in mahogany with bent plywood legs; by B. J. Harris.

RADIOGRAM cabinet, also in mahogany; by J. Brown

From a Technical College

THE LCC TECHNICAL COLLEGE for the Furnishing Trades—formerly the Shoreditch Technical Institute—is not a training-ground for designers or potential designers as such; it caters “for students who are training for or working in all branches of the [furniture] industry.” Its studies fall into three groups: evening classes attended mainly by adults; day-release classes for youths of 16 to 18; a senior school which provides a two-year basic course for intending designers, draughtsmen, craftsmen or executives. The furniture illustrated (with the exception of upholstery) is the work of senior school students, of whom there are some 40, aged 16 upwards. B. E. Clark is Instructor-in-Charge of this department, with B. A. North as instructor in design.

Furniture designed and made by students was recently exhibited at the College. A feature of the exhibition was the variety of styles to be seen; evidently there is no attempt to impose an instructor's personal likes and dislikes on his students, but there is willingness to let them experiment—and learn by experience.

DESIGN VERSUS DANGER



Many accidents in the home are due to badly-designed equipment : by Kenneth Howes, MSIA

IN ENGLAND AND WALES last year, approximately 6,000 people were killed in accidents in the home, and at least another 60,000 were seriously injured. This shows the existence of an urgent problem which designers can do more than any other group to solve.

Function and appearance in domestic design are receiving a great deal of serious attention, but the problem of safety has not been studied to the same extent. There is little doubt that a large proportion of accidents in the home are due to household equipment, which if designed differently would considerably reduce the number of accidents.

Before designers can tackle this problem in an effective way a great deal of information which is not immediately accessible will be required. Very little detailed information on accidents in the home is now available, as no thorough survey has been made. It is possible to discover from statistics the number of people who have been killed as the result of burns, scalds, gas, electric shock, suffocation, etc, but these general headings do not help the designer very much. The information required can only be obtained by carrying out a thorough survey over a long period. Such a survey would be expensive, but a thousand more people are killed in the home every year than on the road, and as a vast amount of money is spent on road safety campaigns it seems reasonable to suggest that the money should be forthcoming.

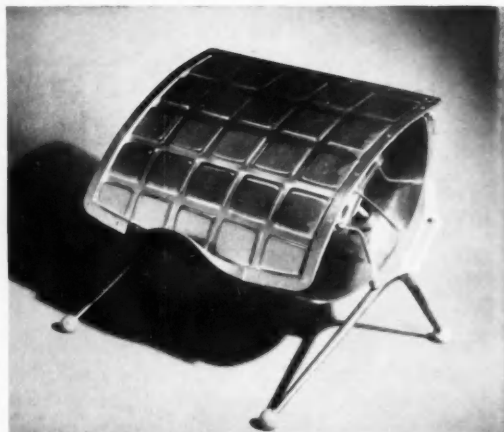
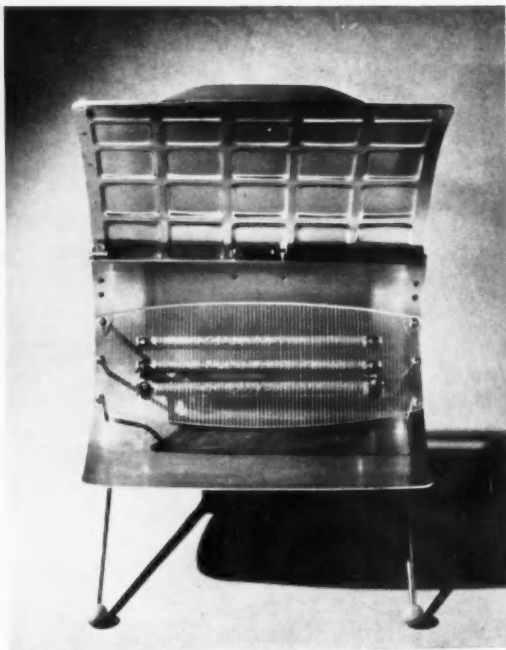
Through a national survey of this kind it would be possible to obtain detailed reports, with diagrams where necessary, of fatal and serious accidents occurring in the home. Information could be sorted and tabulated in detail at a central research office, and then passed on to all manufacturers and designers who were known to be concerned with the design of the type of household equipment involved. In this way

the designer would know the number of deaths attributable to any one type of appliance, and would have details of causes.

A research organisation of this type should have sufficient authority to stop the sale of all household equipment which it considered dangerous. Equipment of any type known to be responsible for accidents should be tested carefully before being allowed on the market, and if its safety standard was proved to be sufficiently high it could be allowed to display a safety symbol. The Electrical Development Association has already taken steps in this direction—it can condemn unsafe and improperly constructed electrical appliances which are brought to its notice; but measures like this should not be restricted to electrical equipment only. The Royal Society for Preven-



The Creda electric kettle is unconventional in appearance—not for the sake of being unconventional but for safety's sake. The handle, of shock-resisting plastic, is so placed that the user's hand keeps clear of steam; and the lid, of patented design, cannot fall out



Suggested design for a safe electric fire, produced as a student project at the Royal College of Art. The cover folds gently down over the fire, which is at the same time switched off, if it or the platform on which it stands is knocked. The transparent element-guard is of toughened glass. (Photographed from a model shown in a recent exhibition of RCA students' work. Designer, M. H. L. Holland)

tion of Accidents is also doing excellent work on accidents in the home, but is prevented from carrying out this work as effectively as it might because of limited financial resources.

Research is almost certain to bring to light unexpected results. It may be discovered that appliances which have been regarded as dangerous are in practice less dangerous than was imagined; while other previously unsuspected types of household equipment are revealed as highly dangerous.

A product may be perfectly safe when used as it was intended, but become dangerous when some ingenious person starts to use it for some other purpose. The designer cannot always foresee such misuse, but if research can show him that a design has lent itself to dangerous adaptation or has become dangerous through certain unforeseen circumstances, he may be able to make some modification that will prevent a recurrence.

In this article it is possible to mention only a few examples, arbitrarily selected, of familiar types of appliance which require attention:

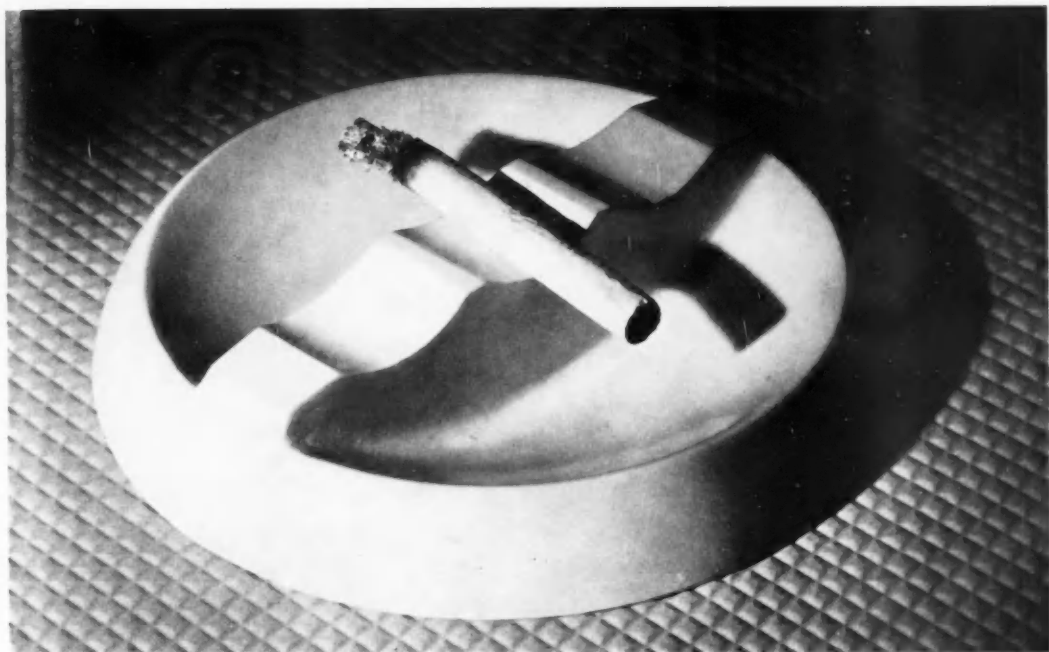
1: ELECTRIC FIRES. Fires on the market today have, with few exceptions, inadequate element guards. An electric fire, especially of the portable type, unprotected in this way is a potential danger to anyone

in long loose-fitting apparel such as an evening dress or a nightdress. In particular, electric fires should always have effective element guards when there are children in the house. They should also be very stable so that they cannot be knocked over easily by animals or small children. An automatic cut-out on all electric and gas fires, which would come into action if they were knocked over, would be a step in the right direction.

2: ASHTRAYS. The types of ashtray now most commonly used are far from safe. A cigarette placed in the groove at the edge of the tray will fall off if left for any length of time owing to the movement of its centre of gravity as it burns. Many fires must have been caused by ashtrays of this kind, yet they are still produced in their thousands every year.

3: ELECTRIC IRONS. The production of electric irons without thermostatic control should be made illegal, for without this the danger of fire is great.

Particular care should be taken to ensure the safety of children in the home. Apart from the everyday risks to which they, like adults, are subjected, there is the additional menace of dangerous toys. Children should not be given fluffy toys which are liable to



choke them, celluloid toys which can easily burst into flame, toys with sharp edges, or animal toys with button or pin eyes that can be pulled off—and easily swallowed. Wooden toys and cots should be finished with non-poisonous paint; babies have been poisoned by chewing the paint off. It is, of course, the parent's duty to be intelligent in the selection of children's toys, but the task would be made easier if toys were designed with more thought of safety.

To sum up: the problem of achieving safety in the home calls for a research organisation, preferably built round the experience of the Royal Society for the Prevention of Accidents. With such an organisation behind him, the designer could at last begin to tackle the problem of danger in the home with a confidence and knowledge that he has never before possessed.

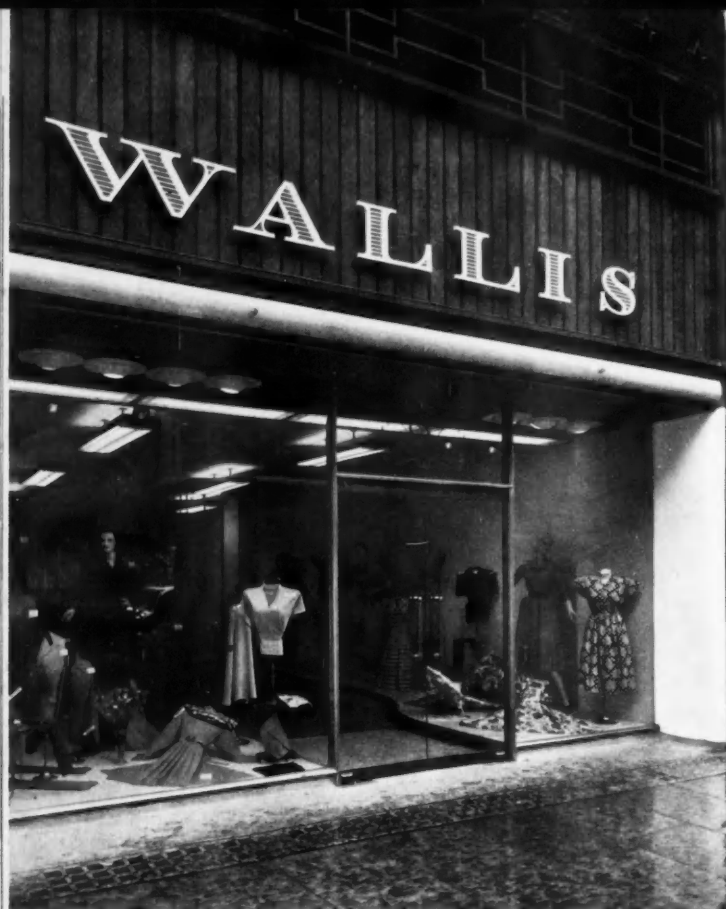


ABOVE: Ashtray designed for safety; if the cigarette burns away, it cannot fall off and set fire to the surface on which the tray is standing. Prototype: designed by Kenneth Howes

RIGHT CENTRE: The Ventube is an air outlet for the safe filling of hot-water bottles. In aluminium with moulded rubber support. Devised and designed—including packaging and display—by Scott-Ashford Associates for Colanacas Ltd

RIGHT: Eyes for dolls or toy animals, sewn on with thread passing through the shank, which is made in one piece with the eye. By Dean's Rag Book Co Ltd. Designer, Richard E. Ellett





Contrast in shopfronts: The innovations made inside Wallis's North End, Croydon, branch, were not reflected in the exterior of the premises (above). The type of front which is standard for new Wallis branches (left) was designed by Maurice Russell. The Manchester shop is illustrated here. What appears above the top of the fascia is no part of the architect's design but a hangover from somebody else's idea of modernity—over which Wallis's, as tenants, had no control

WALLIS

Wallis and Company (Costumiers) Limited

111-3 GREAT PORTLAND STREET LONDON W1

Telephone M1.Scum 2261 (4 lines) Telegrams Walscostum London



Accepting the principle of family resemblance, Wallis's use the distinctive letter-form of their name on printed matter as well as premises. Dress bags are illustrated below, with stationery for head office and branches on left. The lettering of "Wallis" was designed and drawn by Arthur Hundleby; Union Pearl—one of the oldest English display types, recently revived by Stephenson Blake—was specified for the full name of the company

Experiment in multiple-shop layout

Popular-price dress shops introduce contemporary design in furniture and fittings to a wide public in suburbs and industrial towns

EIGHTEEN MONTHS AGO, the first signs of a design policy which is now evident in Wallis dress shops in various parts of the country were to be seen in the firm's branch in North End, Croydon. This shop has a front that is no more distinguished than its undistinguished neighbours; and the first changes were made inconspicuously, inside the premises. A search for better-designed furniture than is generally used in suburban dress shops led to the installation of new combined stock and display fittings, specially designed for the purpose by Geoffrey Dunn.

From this beginning, the scope of Wallis's programme of design improvement has been extended to include not merely shop fittings but whole shops—fronts, floor plans, colour schemes—as well as printed matter including stationery and dress bags. With the active encouragement of the directors, H. S. Warner, estates and public relations manager, has co-ordinated the work of designers and contractors to achieve the results illustrated here. Further fittings have been designed by Maurice Russell, ARIBA, dipl. Arch., and by Geoffrey Dunn; Mr Russell is the architect for all new Wallis shops; and Arthur Hundleby, MSIA, has designed lettering for use on shop fascias and in print.

The shops shown on pages 24-26 are at Croydon; 217 Oxford Street, London; and 125 Market Street, Manchester. The Oxford Street branch is of special interest for two reasons. One, although it trades under the name of John Keen Ltd (an associate company of Wallis's), the same distinctive style of lettering that is used for "Wallis" elsewhere is used on

the fascia here. Two, the comparatively casual nature of the Oxford Street trade has made it practicable to try out various changes in the interior layout of the shop and to observe their effects on its turnover. The most unusual feature of the planning is that it breaks away from the deeply recessed doorway, often elongated into an arcade, which has been popular in dress shops in recent years. The windows are set back slightly from the building line, the glass doors are flush with them, and the window-gazer in the street feels that the barrier between her and the shop interior is reduced to a minimum. This feeling is heightened by the style of window display adopted; the displays are raised on low platforms without any screen at back or sides to shut them off from the main part of the shop or from the doorway. Some window-shoppers evidently found this intimacy too much for them: from inside the shop, one could see them walk into the open doorway and then suddenly recoil—feeling their feet on the carpet of the shop floor—with a slightly embarrassed air, as if they had wandered into a private house. Since the photograph overleaf was taken, the edge of the carpeting has been moved several feet further back, and the paved area of the doorway has been correspondingly extended inwards to overcome this shop-shyness.

On the other hand, the original layout, with carpet-edge only a few feet back from the street, has been adopted in the newer Manchester branch, and there it has proved successful. The explanation put forward by the firm is that this shop can be seen to have a large ground floor, whereas in Oxford Street part

of the premises is downstairs, and a view of the ground floor therefore gives a misleading impression of the size of the branch as a whole. Another factor, one suspects, is that in too many dress shops in and around Oxford Street, the salespeople are over-eager to pounce on any unsuspecting customer who comes within range; and business at the John Keen shop may suffer as a result, however good its designer's and owners' intentions.

Other Wallis shops which have lately been designed (or redesigned) in similar style are the branches at Birmingham, Blackburn, Bishop Auckland and Scunthorpe. To bring well-designed furniture and fittings into the environment of people who go shopping for low-priced dresses in industrial towns like these is a forward step; it can widen the appreciation of good design at the same time as it attracts new custom for the Wallis shops.



In the London shop (below) the special light fitting on left was designed by Maurice Russell and Geoffrey Dunn. Swedish Triva tables, Ernest Race chairs, fluorescent light fittings by GEC and a wallpaper by Cole and Son help to complete the picture. Above, the same type of layout has been adapted to the more spacious floor plan of Wallis's Manchester branch. The same contemporary furniture is used here too





Triva
bove,
orary

SHILLIBEE'S OMNIBUS 1829



Paddington to Bank 1/- On July 4th, 1829, travellers between Paddington and the Bank could board London's first 'bus. Mr. Shillibee's single-decker was horsedrawn, but this famous omnibus was the last word in speed and, in spite of cobbled streets, in comfort for public road transport. Festival year visitors arriving at London Airport finish their journey in the latest of modern coaches — the "Wayfarer" type built by Harringtons on Leyland "Royal Tiger" chassis This follows today's coachbuilding practice in using aluminium extensively.

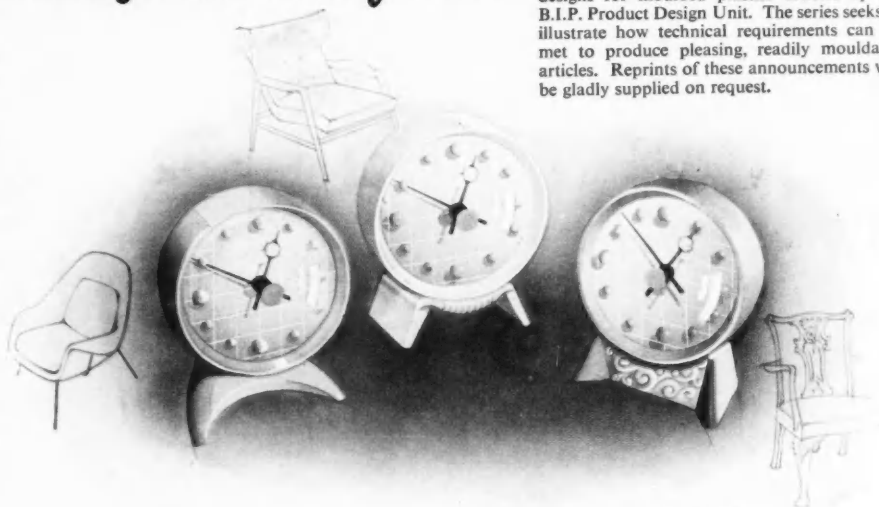
BRITISH ALUMINIUM



B.O.A.C. MOTOR COACH 1951

Designer's Diary N°2

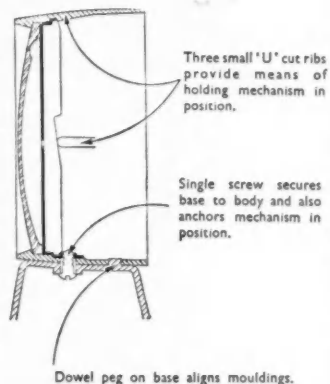
This is the second in a series of indicative designs for moulded plastics articles by the B.I.P. Product Design Unit. The series seeks to illustrate how technical requirements can be met to produce pleasing, readily mouldable articles. Reprints of these announcements will be gladly supplied on request.



The Product. A clock to fit its surroundings. Here is an attempt to provide a simple, readily mouldable clock housing with three separate stands, the characteristics of which suit the product to three representative furniture styles. Using a standard main housing with optional stands is far more economical than designing three separate clocks and just as satisfactory.

The Design. The clocks are conceived as two-piece mouldings for economy and interchangeability. All the bases are made by straightforward up-and-down moulding. The main housings require 3-plate stripper-type moulds to provide for undercuts which hold the mechanism in position. Housings are held to bases by a single screw which passes through into the metal structure to locate the mechanism. Bezels are made deep to protect the domed 'glass'.

The Material. Clock 'glasses' moulded from clear polystyrene or acrylic material, the bubbles being moulded in to give a 3-dimensional effect. Housings moulded from 'Beetle', chosen for its excellent colour possibilities. Vertical and horizontal lines produced by an overcheck material or by engraving on the clock face.



The B.I.P. Technical Advisory Service will assist industrial designers and manufacturers who use plastics mouldings in their production processes. Advice is freely offered regarding product styling, mould design, choice of materials and moulding techniques. The Service exists primarily to assist your own designers and technicians regarding those problems peculiar to plastics moulding, with which only a specialist can be completely conversant.

BRITISH INDUSTRIAL PLASTICS LIMITED



1 ARGYLL ST., LONDON, W.1

'BEETLE' is a trade mark registered in Great Britain and in most countries of the world



ERASER 1 : Heavy headpiece, long handle



2 : Redesigned in cast aluminium



3 : Current model: note convenient switch

Evolution of an electric eraser

THE 'ARIEL' electric erasing machine, made by Hall Harding Ltd, is intended for use in drawing offices, to erase ink lines from plans or maps on paper or tracing cloth.

The first model (above) was rather unwieldy; the machine was later redesigned, with the motor reduced in size and encased in polished aluminium; at the same time, the switch was moved to a handier position.

The machine now on the market (at £7 10s) shows little alteration in shape, but the finish has been changed and a press-button switch—placed where it can conveniently be operated by the fourth finger—has been introduced.

Smooth finish

CRACKLE FINISHES for metal products and parts, which have been popular in recent years, have the practical advantage of looking well on a surface which is not perfectly smooth, whereas a glossier finish shows up slight unevennesses. They have also a corresponding disadvantage: because they are themselves slightly rough, they collect dirt which is then very hard to remove.

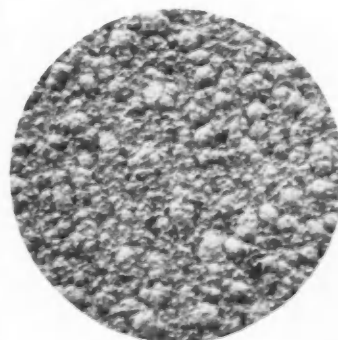
The finishes known as Dimenso, which are now becoming widely used, have the same advantage without the disadvantage: they are smooth in reality though not in appearance. To the eye, they present a slightly irregular pattern of almost three-dimensional character, but their surfaces are smooth. In fact, a Dimenso finish is a combination of two paint films of different degrees of viscosity — the "background" colour

being normal while the "accent" colour is applied in a heavy consistency. The size of the pattern produced depends on the pressure at which the two films are sprayed, their relative rates of flow, and the degree to which they combine.

Only one spraying is required to apply both films. They both leave the spray-gun simultaneously by the same nozzle, and they are controlled by a single trigger; but they are fed into the receiving chamber of the gun, under pressure, from a special container divided into two separate compartments.

The process originated in America; in Great Britain, the spraying equipment is supplied by Dimenso Ltd, a company of the Berger group, while the finishes are obtainable from seven well-known paint manufacturers.

A number of technical advantages, besides those suggested above, are claimed for the Dimenso process. Like many modern industrial techniques, it can be used equally in the production of a well-designed or a badly-designed article; but its special characteristics ensure it a legitimate field of use.



Photograph of a smooth surface: see above

The SIA is twenty-one

THE SOCIETY of Industrial Artists celebrated its twenty-first anniversary with a dinner on 16 October at Goldsmiths' Hall. Lynton Lamb, the President, outlined the aims of the Society as the professional body for industrial designers and laid stress upon its status as the only society representing the profession as a whole.

He went on to say that though the Society was comprehensive in its scope, there was room for greater comprehensiveness in the membership, if the Society was to represent the profession fully in the affairs of the nation. There were some experienced and able designers practising in Britain, who were not yet members. The Society was addressing a letter to all such designers whose names were known to the Society, inviting them to apply for membership.

The President emphasised that, in this anniversary drive for increased membership, the SIA's present standards of technical and artistic competence would be maintained. He also announced that the established policy of forming technical Groups within the Society was being further developed at the same time. This was the proper pattern for the SIA's structure, because it included designers for many different industries. In future there might be further subdivision of the Groups. The present list of Groups was as follows: *Groups already constituted:* Furniture; fashion; textiles; exhibitions; typography; illustrators; posters; packaging; advertising. *Groups in formation:* General consultant designers; equipment; mechanical; engineering; transport; pottery and glass; cutlery and plate; toys and games.

Sheffield pays tribute

A Festival exhibition of the work of Alfred Stevens

FESTIVAL CELEBRATIONS have taken many forms. Sheffield—alone, so far as we know, among provincial cities—paid tribute to an industrial designer of a century ago: the Festival exhibition at the Graves Art Gallery included a whole room devoted to the work of Alfred Stevens (1817-75).

Stevens's life has been fully chronicled.* The most important years, in the context of this exhibition, were 1850 to 1852, when Stevens was employed as

designer by Henry E. Hoole and Co Ltd, ironfounders, at Green Lane Works, Sheffield. His influence was both more lasting and broader than this bald statement might suggest: more lasting, because he influenced a younger generation of designers as an "unofficial visiting professor" at the Sheffield School of Art (whose principal had himself studied under Stevens in London); broader, because he designed for a number of firms besides his employers. During or after Stevens's Sheffield period, his work included hunting-knives for Bradburys; and, outside Sheffield, pottery for Mintons, silverware for Potts of Birmingham, and fireplaces for the Coal-

brookdale Company. He was probably the only major artist of the nineteenth century who practised widely as a consultant industrial designer.

Though the phrase was unknown in Stevens's day, it is none the less accurate. His designs were genuinely industrial; they were designs for quantity production, using the industrial techniques of his day. As K. R. Towndrow has written: "Contrary to William Morris, Alfred Stevens was always of the opinion that, with adequate design and organisation, mass production was capable of a high quality of object and finish."

In his acceptance of the machine, Stevens was a pioneer. In his love of ornament, he was of his own time; "ornamentalist" and "designer" were, for him, synonymous terms. But Stevens's ornament was never an added afterthought; it was an essential part of the design: often, indeed, it *was* the design. It was profuse by twentieth-century standards, but of its kind it was good: classical in inspiration, and appropriate in subject. If the designs used by Sheffield manufacturers had never fallen below Stevens's standard, they would have much to be proud of.

A. D.

*Especially in *Alfred Stevens: a Biography with New Material* by Kenneth Romney Towndrow (London, 1939). Mr Towndrow also contributed a 6-page introduction and chronology of Stevens's work to the catalogue of the exhibition reviewed here (Graves Art Gallery, Sheffield 1; price 6d).



Left, design for a plate in the Majolica style; the subject, "Horatius defending the bridge." A water-colour sketch by Alfred Stevens lent to the Graves Art Gallery by the Victoria and Albert Museum



Above, the Proserpine grate, designed by Stevens and shown in the 1851 Exhibition. Only a few examples are known to exist.

The fire-bars are of armour-bright; the back is finished dull black with *The Rape of Proserpine* depicted in low relief.

Left, the original black wax model for a small part of the design, lent by the National Gallery of Scotland

Design and Management : 2

*These points were made at the 1951 Design Congress**

ARTHUR A. HOUGHTON, JR, Vice-President of Corning Glass Works; President of Steuben Glass Inc, USA:

The disparity between the elements of utility and of satisfaction in man-made articles is a direct result of the rise of modern technological production. We believe that the one great hope of remedy lies in the intelligent development and application of sound principles of industrial design. . . .

In spite of the complexity of large-scale industrial production and distribution, it is possible for us to introduce new designs in as short a period as six months; but a period of a year or more is preferable, to allow time for the withdrawal of the old product and the thorough testing and launching of a new one in the extensive American market. If all phases of the problem have been thoroughly studied, and the product developed conscientiously and skilfully from these studies and tests, experience indicates that the need for a re-design does not occur, even in the most highly competitive market, in less than two or three years.

With the director of design reporting directly to the president of the company, it is possible to co-ordinate effectively the work of the design department with the activities of other departments for the best interest of the company as a whole. . . . The step-child type of design department, reporting to a sales department or an advertising department and seldom called into consultation with executive management, could not provide our answer.

A. D. COPIER, Art Director of Leerdam Glassworks, Holland:

Collaboration between management and industrial designers—who are artists trained to give concrete form to ideas and who have an understanding of social and cultural life—is indispensable

in the manufacture of products which raise the standard of living.

As a rule, a good design makes severe demands on the production side. However, the manufacturer and the industrial designer both strive for the same aim—to make a product of good quality. . . .

A problem which every designer comes up against, time and again, is whether to decorate a design or not. The artists working with Leerdam have always taken the view that decoration is possible, and that with cutting a more striking form may be created, or the material may be used more effectively.

It is usually necessary to decorate pressed glass, but it should not imitate cut crystal or blown glass. The decoration should enhance the effect of the material; it is conceivable that certain types of decoration help to increase output.

Even the best product cannot do without publicity, and the greatest attention should be paid to it. Advertisements, exhibition stands, packaging and catalogues should all have the same character and should be designed by experienced commercial artists.

SOREN HANSEN, Director, Fritz Hansens Eftfl., Denmark:

When watching the different stages of manufacture one cannot help noticing that if some details of a design were changed, the machine could do its work more quickly. And one may ask, is it not practical, and rational, for the designer to acquaint himself a little more closely with the problems of machine production? It must be possible to save time through a more simplified and more logical shaping. But there are two kinds of logic—the designer's and the machine's—and we simply cannot limit the designer's logic to the machine's capacity. We cannot tell a designer "Our machines work in such-and-such a way; design the chair accordingly." We have to say to him: "Let your artistic sense design the shape as you feel it ought to be."

My job as a technical expert is to work out as simple and as economical a pro-

cess as my machines allow me. His ability as an artist is more valuable than my machines. . . .

Of course it is of value for a designer to know something about wood and machines, but I want especially to point out that he should not design the model for the machines but should let the machines execute as economically as possible the type of furniture he wants. If one designs furniture to fit machines, it will inevitably hamper the development of machines and put a brake on further technical progress.

RUDOLF KALDEREN, Vice-President, AB Nordiska Kompaniet, Stockholm:

The Nordiska Kompaniet plays a very important though rather unusual part in Swedish life as a result of its manifold activities. In all justice we must say that there is hardly any undertaking in Sweden which enjoys the same advantages—a rationalised production and a rationalised sales organisation. . . .

The popularity attaching to the name NK, which the company has won through years of hard work and at considerable cost, is very important. The leading position of the Nordiska Kompaniet in the Swedish retail world, as well as its position in Stockholm, means that everything introduced on the market bearing the name NK takes precedence over other products. Other firms have to spend immense sums making their products known, whereas people know the name NK all over the country as a result of extensive advertising. . . . This was undoubtedly an important factor in the success of our *Triva* and *Futura* furniture when it was shown by the retail trade to customers in the provinces: very little advertising was done then—only two small publicity campaigns, followed by the distribution of



The Congress lapel badge (above) was designed, made and presented by Wilmot-Breeden Ltd, Birmingham. It is the smallest example yet made by the technique described in DESIGN, December 1950 (pages 22-23)

* Other points from papers read at the Design Congress have been quoted in *DESIGN*'s October number (pages 2 and 27-28) and on pages 12-13 in the present issue. The complete papers can be seen in the Library of the Council of Industrial Design.

booklets and catalogues. . . .

The contract department has helped to publicise the work of the company beyond the immediate circle of retail buyers and has brought the factory, too, into the limelight. The public has been able to see, especially from the contract department's furnishing of public buildings, that the products from the Nordiska Kompaniet's workshops are of excellent quality. When the *Triva* and *Futura* models appeared on the market, the maker's reputation for good quality and reasonable prices was already established. . . .

IAN HENDERSON, MSIA, FIBD,
Director of Design, Story and Co Ltd
(subsidiary of Hampton and Sons Ltd):

Up to 1945, the main activities of the Story Studio were the preparation of decorative furnishing schemes and the design of special fittings and occasional pieces of furniture. . . . When we tackled the designs of our first range of furniture in the Utility category, before actually starting work, we discussed the possible requirements of the public *vis-à-vis* our own likes and dislikes, and we concluded that:

1. The popular market is behind advanced design thinking. It would be risky if we, as retailers, assumed an educative mission and followed in line with a tinsel display technique, which we feel is hardly good interior domestic architecture.
2. The public generally want something new, but only gradually. Their final decision is controlled by conservatism and by the fact that they are probably making a life-long purchase. Unlike the motor-car or even the house, furniture is bought as a permanent possession.
3. Our complete lack of success in selling other manufacturers' Utility furniture proved that the public expected a different approach to design when they visited Story's, as well as superior quality at no higher cost. . . .
4. New materials or new processes are not automatically superior to traditional materials or techniques.
5. Our designs must avoid any post-war design clichés that are unsuitable for the average English home, and we should aim to give designs that indefinable quality which allows demand to carry on indefinitely. . . .

Our second range of tax-free furniture, *Unad*, was produced at the end of 1950 and shown for the first time at the Ideal Home Exhibition, 1951. The response was remarkable: we had to call in the assistance of our parent company and another furniture factory to help in production.

BERNARD B. WINTER, MIMechE,
Director of Engineering, The Rootes Group (Humber, Hillman, Sunbeam-Talbot cars; Commer, Karrier, Tilling Stevens commercial motors):

The designer must maintain the closest contacts with the planning engineers and with production, supply, sales, advertising and service. . . .

Committee design is a major disaster which should be avoided at all costs. . . .

A colleague of mine likened the designer to the hare at a greyhound race-track, where the hounds represent public opinion. To be effective, the hare must always keep a carefully judged distance ahead; if he gets too far in front, the hounds lose interest in him; if he goes too slowly and they catch up with him, he soon ceases to fulfil the role for which he was intended.

Modern production technique demands very extensive—and very expensive—tooling, so that it is not normally good economics to budget for less than a seven to ten-year life for any new basic model or major unit which it is intended to produce in quantity. Allowance must therefore be made in the original design for appreciable development of details without major structural alteration, in order to keep the model fully up-to-date during this period.

C. H. JACKSON, BSC (Eng), ACGI,
AFRAES, Executive, British Overseas Airways Corporation:

In the time of rapid technical development immediately after the war, there were many important technical and commercial problems to be solved. Nevertheless, one of our early moves, in co-operation with the Council of Industrial Design, was to invite a number of well-known industrial designers to advise on some items which could be established independently of the outstanding traffic and aircraft problems.

These designers, working in conjunction with our management, set the basis for a standard colour scheme, which has evolved into our well-known blue, white and gold. They advised on the most suitable type-face, and considered items like letterheadings and menu cards, together with the judicious use of the *Speedbird* emblem. Cutlery and crockery were designed specially for use in aircraft; they had to be light, easily cleaned and of simple line. Ranges of uniforms were designed for aircrew and ground staff in various climates. Standard designs were developed for furniture and public equipment in our booking centres. Finally, an attempt was made to formulate the desirable lines and appearance of aircraft passenger chairs and various cabin fittings.

We are continuing to build on the results of this initial programme, but in some instances it is a slow process. For example, because of the intensity of operations coupled with supply problems, it has only recently become possible to commence the progressive re-upholstering, in accordance with our present colour scheme, of some aircraft bought at the end of the war.

BOAC Comet air liner: see page 3.

DR A. PLESMAN, President of KLM
(Royal Dutch Airlines):

Real industrial design has a much wider meaning and scope than the mere aesthetic or commercial tricks sometimes employed to give one's product a pleasant shape or appearance. Fundamentally, industrial design should have its roots in the whole personnel of a company. . . .

We have come to feel that from the commercial point of view a sound and consciously pursued design policy does pay, although the results cannot easily be measured in currency. Apart from these direct commercial results, it has valuable indirect effects. . . . Industrial design genuinely stimulates modern industry to contribute to the shape and character of this century within the context of a practical, even commercial, theme.

HAROLD HARTLEY, D.S.C.,
Chairman, Radiation Ltd:

Good design may be described as a solution of the problem of producing results at the same time constructionally, functionally and aesthetically satisfactory, in anything made by man for man's use. In defining good industrial design, the qualification has to be introduced that it must represent such a result as is capable of quantity production by mechanical means. . . .

In the second decade of the present century . . . there was a growing appreciation of the need for specialist advice to enable improvements to be effected in the outward form of the product. This started in the field of domestic heating, where it was realised that the form and finish of a gas fire played a big part in determining its sales-appeal. Such advice was obtained by engaging as consultants men with architectural experience. Here was the nucleus of the modern design team.

Men with architectural training were added to the teams, or, alternatively, engineering draughtsmen with an appreciation of form were employed; and with the inclusion of sales experience the teams became self-sufficient.

More points from speeches on p. 34.



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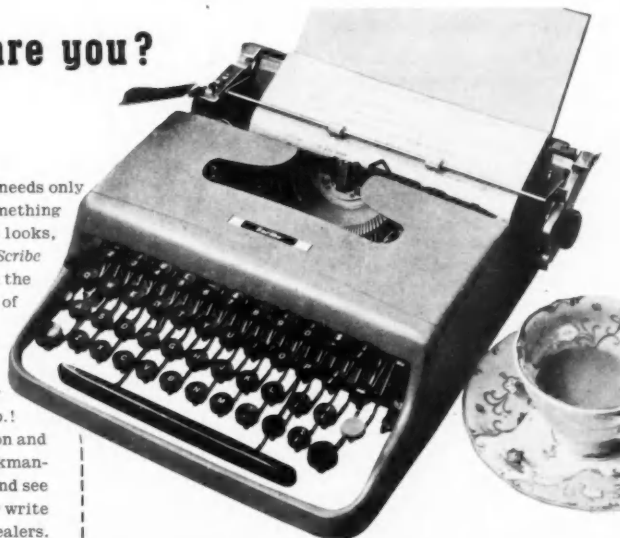
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continued from page 32

W. T. WREN,
Director, Allied Ironfounders Ltd,
Managing Director, Aga Heat Ltd:

Contemporary industrial enterprise cannot remain successful if it ignores the importance of design. . . . [The person who decides on new designs] must be one who has had a wide and general experience in his industry, has travelled widely, and has the sense and feel for the artistic, and an understanding of the difference between the artistic and the commercial mind. . . .

We are all human, and the pattern-maker who for many years has been regarded by his firm as their expert on design may become mulish if he feels he is being overridden by someone who has never made or cast a mould. Only top management can grease all the wheels and prevent excellent outside design ideas being crucified at all the levels they have to pass. . . .

The Aga cooker, which for twenty years has earned the praises of those competent to express opinions on design, has never had the hand of a professional designer upon it. May I quote Carl Otto, who worked with us on this particular project, as saying on one occasion: "the darned thing looks like the Bank of England, you charge a lot for it; why not leave it alone?"

ARTHUR N. BEC VAR, Director of
Design, General Electric Co, USA:

One out of every 300 people in the United States makes his living from producing, selling or servicing a General Electric product: we manufacture about 200,000 items of electrical equipment. Obviously, this poses a tremendous marketing job, and the marketing area of operation in the General Electric Co is a much broader concept than the traditional sales-management organisation. The principal change is in the additional functions of product planning, production scheduling and appearance design. . . .

Specialisation on appearance design within the company began in 1928 with one industrial designer and a very small staff. The results of this man's efforts to improve the appearance of consumer goods met with such acceptance that the staff and facilities were gradually increased in size and scope. . . . From one man the personnel has developed into a well-staffed department in each division of the company.

Since the work of the Appearance Design Department is a service which each division can buy, and not one that is arbitrarily assessed against them, the constant yearly growth of the department shows that this is a satisfactory means of operation.

Utility products, such as those that are used in the kitchen and laundry, must have eye-appeal as well as utility, since they have become more closely related to the living area. With the open plan which is becoming more popular in American houses, all the equipment must be attractive.

A. W. TOY,
Executive of Roneo Ltd:

We operate a research and development team which consists of the chief designer, who acts as chairman; sales representatives, who ensure that the needs of customers are covered; the production engineer, who can advise on manufacturing features; the chief chemist, to watch over the use of materials; an architect to safeguard designs aesthetically; the advertising consultant; and the higher company executives up to managing-director level. By this means all concerned are kept aware of design progress through the various stages and quick decisions are possible at every stage.

We find, as a business concerned with a multiplicity of lines, that it is a good thing in design to adopt a similar trend in the appearance and finish of all products, particularly in colour. This resemblance in no way limits function and fundamentals.

It is not unknown for users to judge the worth of an article by its packaging, and defects in this respect can have unfortunate repercussions on sales.

T. MARCHETTI, Vice-Chairman,
John Crossley and Sons Ltd:

Mentally, I divide my pattern ranges into bread-and-butter, currant-cake and cream-cake. The bread-and-butter makes the wheels go round and pays the shareholders, but there is no reason why your bread-and-butter should not be of the best quality.

In a range of a hundred patterns, the percentage would work out roughly at 65 bread-and-butter, 25 currant-cake and 10 cream-cake; what is interesting and encouraging is that, more often than expected, this year's currant-cake becomes next year's bread-and-butter.

At present we employ 18 full-time designers on the staff, two at our London showrooms and the remainder at the factory at Halifax. We allow each designer to take one day a week off in the firm's time during the summer months; they can go out or stay at home and paint whatever they like; the only proviso is that they have to show next day what they have painted. Every second year, we put on an exhibition of their paintings in the local art gallery, and they are allowed to sell the results of their day of liberty on their own account.

THE HON. JOSIAH WEDGWOOD,
Managing Director,
Josiah Wedgwood and Sons Ltd:

. . . The popular market has become the commercially attractive one. But if the most profitable market has become democratic, reputation remains a matter for aristocratic standards. That fact must be faced. Whatever one's politics or temperament or social outlook, it remains an undeniable fact that progress in thought and art comes not from the majority but from a small minority, as heretofore—and from a minority that is now not usually the wealthiest section of the public.

See biographical article on pages 4-9.

DR MICHAEL WATTER,
Director of Research,
the Budd Company, USA:

In addition to the engineering divisions, design suggestions come also from domestic and foreign sales and manufacturing branches: senior sales personnel are capable engineers with considerable experience in the company's engineering and research activities. . . .

The Vice-President for Engineering and Research approves or instructs the initiation of designs.

C. S. AGATE, OBE, BSC, of
EMI Engineering Development Ltd,
subsidiary of
Electric and Musical Industries Ltd:

The whole design function is under financial control, in that an estimate for doing the work is provided before the job is started and is included in the appropriate budget. The head of the design section undertaking a job knows how much money he is allowed for the job; he has full access to costs as they are incurred; and he is responsible for seeing that in no circumstances does he pass the sum allowed without reporting the reasons for it, so that further sanction can be given or other appropriate action taken. All designs, when completed, are subject to formal approval by the design executive committee before going into manufacture.

The study of market tendencies and requirements lies almost entirely with the sales company, whose senior staff has a very large responsibility in matters like appearance and convenience in use. . . . All new designs, just prior to completion, are submitted to the Group's service organisation for comment, to ensure that anything in them which has given trouble in earlier designs is eliminated before manufacture starts.

People



ALISTER MAYNARD has been appointed Chief Officer to the Scottish Committee of the Council of Industrial Design (in succession to WYNDHAM GOODDEN, now Director of the Rayon Design Centre). Widely known as a designer of contemporary furniture of the luxury class, Mr Maynard resigned

his commission in the Seaforth Highlanders some years before the war to pioneer the sale of contemporary furniture from his own London shop.

D. W. BUCHANAN, Secretary of the National Industrial Design Committee of Canada, notifies us of a second product design competition, closing on 15 January 1952. It is open to Canadian residents or citizens, who can obtain particulars from Mr Buchanan at the National Gallery of Canada, Ottawa. Briefly, there are four divisions with a first prize of \$1,000 in each—for designs (suitable for quantity production) of a wooden chair, an aluminium chair, a writing desk in wood and a set of aluminium door-furniture.

MISHA BLACK, Director of Design Research Unit, has been appointed consultant to the Government of Ceylon in connection with the Colombo Plan Exhibition, to be held in Colombo in February 1952.

In addition to acting as consultant on the planning and design of the Exhibition as a whole, Misha Black will be responsible, in collaboration with his colleagues of Design Research Unit, for the detailed design of some pavilions and displays.

PHILIP ULBRAND has been appointed London Director of Raymond Loewy Associates:

WILLIAM C. RAISER, former London Director, will represent the firm on a tour of Europe, serving as design consultant on a packaging mission sponsored by OEEC (the Organisation for European Economic Co-operation). The purpose of the mission is to explain American techniques and give advice on packaging to possible exporters in the several countries which it will visit.

T. G. PAGE, FRSA, for many years Principal of the LCC Technical College for the Furnishing Trades, retired at the end of the summer term. He is succeeded by L. J. KAPE, ARCA, formerly Headmaster of the Halifax School of Art. The College (see page 20) has moved back from temporary premises to its old home at Pitfield Street, Hoxton, London N1 (Clerkenwell 1898).

JAMES DE HOLDEN STONE, FSIA, and WARNETT KENNEDY and Associates are now collaborating on the exhibition and display side of their practices.

Professors R. D. RUSSELL and R. Y. GOODDEN have been appointed design consultants to Berkeley Coachwork Ltd, caravan manufacturers.

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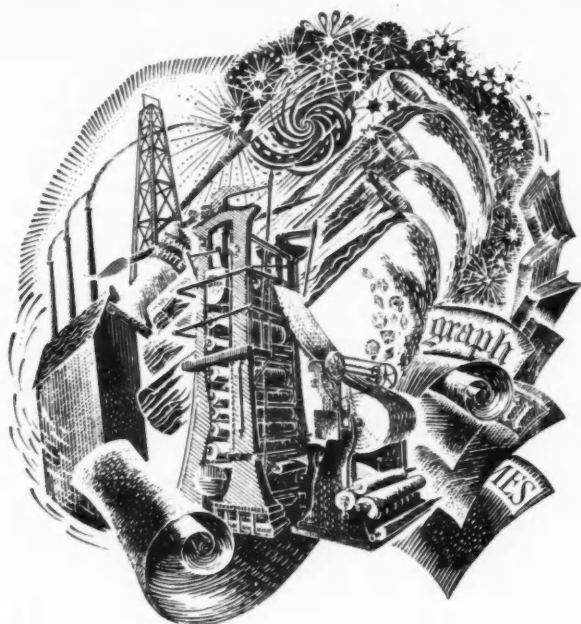
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BARIUM

Patients may associate barium with the unpalatable meals which they are given before an X-ray examination, but it is barium sulphate which is used for this purpose, and not the soft silvery-white barium metal. Barium is found in nature in the form of barytes (barium sulphate) and witherite (barium carbonate); it is never found free since the metal readily reacts with air and moisture. It was first recognised as an element by Scheele, a Swedish chemist, in 1774. Its name is derived from a Greek word meaning heavy, because all barium compounds are much heavier than an equal volume of water. Barytes

deposits; often found in lead and zinc veins, are mined in the North of England, Germany, Canada and United States. Witherite is far less common. The most famous witherite mine in the world is at Hexham in Northumberland, and workable quantities are also found in Durham. Compounds of barium are important in the manufacture of paper, glass, oilcloth, linoleum and in oil well drilling. Barium metal itself is used to remove the last traces of gas from radio valves and television tubes.



I.C.I. uses barium sulphate in the manufacture of paint, and barium nitrate in certain kinds of industrial explosives.

News

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Index



DESIGN in the next few months will carry special articles on many new subjects—all of them of interest and value to anyone whose business is with design.

These are some of the subjects we shall deal with:

Christmas cards—private and business
Industrial design and the machinery
manufacturer

Floral patterns: the English tradition

The Central School of Arts and Crafts

The use of models in design development

Case histories of new products; articles on design policy in action, patrons of design, etc



We can now accept additional advertising to appear in DESIGN during 1952. DESIGN's circulation is steadily rising and it is, at present rates, an excellent proposition for all who have goods or services to offer to the business community



Paper economy demands that this year the index to DESIGN (1951 issues, Volume 3) be sent only to those readers who require it. *The index will not, as in former years, be included in the January issue: if you wish to have a copy please apply now.*

Design

Tilbury House, Petty France, London SW 1

